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## **THE PIECEMEAL APPROACH TO COMPARATIVE ADVERTISING**

**by**

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## **The Piecemeal Approach to Comparative Advertising**

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## **The Piecemeal Approach to Comparative Advertising**

### **Abstract**

When attempting to portray the attractiveness of a brand vis-à-vis its competitors, an ad may make global claims about superiority or specific claims about one or more attributes. A special case of latter is the piecemeal ad in which the advertised brand is compared to a competitor on one attribute, a different competitor on a second attribute, another competitor on a third attribute, and so on. The present research demonstrates the effectiveness of this technique and explores the basis for its influence. A series of experiments reveals a robust effect mediated by perceived message credibility.

Comparative advertising has long interested students of marketing and public policy. Previous research has investigated differences between comparative and noncomparative advertising in terms of attention (Pechmann and Stewart 1990), comprehension (Dröge 1989), attitude (Rose et al. 1993), and brand beliefs (Pechmann and Ratneshwar 1991). Recently, interest has been directed toward the potential deceptive effects of comparative ads, inspired by the possibility that comparatives ad may achieve a persuasive impact not only by making forthright and favorable comparisons to competing brands but also by fostering inappropriate inferences. For example, Johar (1995) reported that consumers may overinterpret the vague claims made in “incomplete” comparison ads (e.g., “CD 2001 is better”). In a related vein, Pechmann (1996) found that comparative ads that mention only the sponsor’s superior attributes may benefit from overgeneralization to attributes on which the sponsor suffers from a competitive disadvantage.

The present research builds on two aspects of these recent studies. First, it examines the potential for comparative messages to mislead. Second, it recognizes that comparative advertising itself is not a homogeneous genre. Rather, comparative ads may vary in terms of the implied breadth and specificity of their claims. In the present research we investigate a specific form of comparative advertising referred to as the “piecemeal report,” which consists of a peculiar combination of breadth and specificity.

In a piecemeal ad, the sponsor brand is compared to one competitor on a particular dimension, a second competitor on a different dimension, a third competitor on yet another dimension, and so on. For example, a recent Mitsubishi ad stated that the Galant is more powerful than a Toyota Camry, more spacious than a Nissan Altima, and more affordable than a Honda Accord. The danger from a consumer perspective is the tendency to infer that the sponsor is superior in an overall sense to all named competitors. In an extreme case, the reality may be that the sponsor scores next-to-last on each dimension, surpassing only the named competitor on each. Such ads possess high potential to deceive but without making a single, false assertion.

Despite its potential to mislead, piecemeal advertising has been virtually ignored as a research topic. Harris (1977) included some piecemeal comparisons in a wider ranging study of pragmatic implication but unfortunately did not report his results as a function of message format. We can only speculate that, consistent with the aggregate results, the piecemeal format prompted inferences that overstated the literal advertising claims.

In the following experiments we examine piecemeal advertising as a specific form of pragmatic implication. Our minimal goal is to demonstrate its effectiveness vis-à-vis other formats. Our more ambitious goal is to describe some of the parameters that may underlie its persuasiveness. We demonstrate that a piecemeal message can foster more positive evaluation of a brand than does an ad that makes a stronger literal claim. We also explore potential limiting conditions. Harris's (1977; Harris and Monaco 1978) research suggests that erroneous pragmatic inferences are quickly made and difficult to suppress or rectify. Increased consumer vigilance provides modest protection at best and cannot be retroactively applied. However, a combination of source and message factors not uncommon to advertising may raise skepticism about some piecemeal ads. Although we find some moderation, we argue in the end that piecemeal ads are effective and are perhaps more effective than other formats due to a combination of the almost ineluctable tendency on the part of consumers to draw pragmatic inferences and a considerable veneer of credibility associated with the piecemeal format. We begin with a simple but very conservative demonstration of the phenomenon.

## EXPERIMENT 1

To date, no study has examined the persuasiveness of piecemeal ads vis-à-vis traditional comparative ads. We included a noncomparative ad condition to ensure that the different versions of comparative ads fare better than the noncomparative ad. More importantly, within the comparative ad conditions, we examined whether the piecemeal comparisons produce greater evaluations than do traditional comparative ads.

### Method

*Subjects.* Subjects were business undergraduates from a major international university who participated in the experiment in exchange for a course credit. A total of 120 subjects participated.

*Product Category.* We sought a product category in which subjects possessed a reasonable level of familiarity but not high expertise. Based on a pretest in which subjects rated their familiarity and knowledge with several product categories, the category of automobiles was chosen. A second pretest showed that subjects had greater familiarity with Japanese brands than American or European brands. In a third pretest, we obtained subjects' overall liking for several brands of Japanese cars as well as their beliefs concerning the brands' standing in terms of safety, power, roominess, and gas mileage on nine-point scales.

We chose four brands in the same price range that varied in terms of subjects' beliefs concerning the four attributes. Suzuki Swift (5.34), Mazda Funtop (5.15), Mitsubishi Lancer (5.04), and Nissan Sunny (5.45) were rated worse than the other three brands in terms of power, roominess, safety, and gas mileage, respectively. Of these, Nissan Sunny received the best rating in terms of overall liking (7.02). These four brands were used as the comparison brands. A fictitious name (Ambassador) was used to denote the focal brand.

*Design and Stimuli.* Message format was the only factor manipulated in the study. There was a noncomparison condition, a piecemeal comparison condition, and a single-comparison condition. In the noncomparison condition, the message asserted that the focal brand (Ambassador) offers "Great Safety, Great roominess, Exceptional Power, and Great Mileage." Within the single-comparison condition, there were four replication groups; each group received a message containing a single but different brand as the comparison brand. In each of the four groups, the focal brand was portrayed as superior to the comparison brand in terms of safety, power, roominess, and gas mileage. For example, one version of the ad stated: "Compared to the Suzuki Swift, the Ambassador offers Greater Power, More Room, Superior Safety, and Better Mileage."

The piecemeal comparisons were constructed such that the focal brand was described as superior to the brand that was judged in the pretest to be the *worst* in terms of each attribute of comparison. In the pretest, for example, Nissan Sunny was judged to be the worst of the four brands in terms of gas mileage. The advertisement stated that Ambassador provided better mileage than Nissan Sunny. Thus, the advertisement was constructed to be consistent with the possibility that the focal brand was next-to-worst on each dimension of comparison.

*Procedure.* Subjects were told that the study involved testing the copy of an advertisement for a new car that was soon to be introduced in the region. Subjects were given four minutes to process the contents of the advertisement. After they processed the advertisement page, subjects responded to a questionnaire that measured their evaluation of the focal brand on three fifteen-point scales anchored by "like least" and "like most," "extremely negative" and "extremely positive," and "worst brand" and "best brand". The questionnaire also measured the purchase likelihood anchored by "not at all probable" and "highly probable" and confidence in evaluation anchored by "not at all confident" and "extremely confident" on fifteen-point scales. We make no predictions regarding the latter measure but we deemed it important to ensure that any effect of piecemeal messages not be

ephemeral. The piecemeal format arouses less interest and concern if it creates misimpressions that are only weakly held.

## Results and Discussion

The mean of the three evaluation scales ( $\alpha = 0.86$ ) served as the main dependent variable (see Table 1). Because there were no differences among the four versions of the single-comparison ads ( $F < 1$ ), the evaluations in the four replicates were averaged. We submitted subjects' evaluations to a one-factor (three levels of message type) ANOVA and obtained a significant effect ( $F_{2, 117} = 12.35, p < 0.01$ ). Additionally, we performed two planned contrasts. A contrast between the noncomparison group and the comparison groups (single-comparison group and the piecemeal comparison group) was significant ( $F_{1, 117} = 13.28, p < 0.01$ ). More important, the contrast between the single-comparison group and the piecemeal comparison group was significant ( $F_{1, 117} = 16.96, p < 0.001$ ).

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Insert Table 1 about here

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In a second ANOVA, we compared the piecemeal comparison group with the single-comparison group that featured the brand that received the highest overall evaluation in the pretest (Nissan Sunny). The difference was significant ( $F_{1, 38} = 5.84, p < 0.03$ ). Thus, the focal brand's evaluation was higher in the piecemeal ad group compared even to the case in which the comparison brand was the best of four brands that appeared in the piecemeal ads.

As in all subsequent experiments reported here, purchase intentions exhibited a similar pattern. Purchase intention was higher in the comparison groups than in the noncomparison group ( $F_{1, 117} = 4.36, p < 0.04$ ). The contrast between the piecemeal comparison group and the mean of the single-comparison groups again was significant ( $F_{1, 117} = 8.96, p < 0.01$ ). The difference between the piecemeal group and the strongest of the single-comparison groups (Nissan Sunny) was marginally significant ( $F_{1, 38} = 3.26, p < 0.08$ ).

Finally, confidence in evaluation was higher in the piecemeal group than in any other group. A series of post-hoc comparisons between the piecemeal group and the other groups revealed that confidence was greater in the piecemeal condition than in the noncomparison condition ( $t_{38} = 4.02$ ,



$p < 0.01$ ) and pooled single-comparison conditions ( $t_{98} = 3.02$ ,  $p < 0.01$ ). The difference between the piecemeal group and the strongest of the single-comparison groups (Nissan Sunny) approached significance ( $t_{38} = 1.75$ ,  $p < 0.09$ ). Thus, at a minimum, the impressions formed from the piecemeal message were held as strongly as the impressions formed from traditional comparative ads.

This experiment offers a conservative test of the biases induced by piecemeal comparison advertising. Recall that on each dimension the focal brand was compared only to the brand that was rated the worst of the four in a pretest. Assuming that subjects in the main experiment and the pretest shared similar beliefs about the four comparison brands, the results cannot be explained in terms of ambiguity of the attributes or uncertainty about the standing of the comparison brands. It is unsurprising that the noncomparison condition fared least well. The brand was fictitious, and the message took the appearance of puffery (see below). It is more notable that the piecemeal ad was more persuasive than a traditional, single-comparison ad. Given the specific comparisons made in the piecemeal ad, the focal brand was given a less flattering description than in the single-comparison case.

One may argue that the effect of piecemeal ads obtained in this experiment is unique to the specific set of comparison brands or to the subject population. To ensure that it was the format of information rather than the brands themselves that drove the effect, we replicated the experiment using fictitious comparison brands. Twenty-eight female students from a large United States university were provided either a piecemeal or single-comparison ad for natural skin lotions. The design of the ads and experimental procedure were identical to the main experiment with one exception: neutral labels (brand A, Brand B, etc.) were used in place of real comparison brands. Analysis showed that ratings of the focal brand were more positive in the piecemeal comparison condition than in the single-comparison ad condition (12.36 versus 10.71,  $F_{1,26} = 4.16$ ,  $p < 0.05$ ), as were purchase intentions (12.21 versus 10.43,  $F_{1,26} = 5.01$ ,  $p < 0.03$ ).

As further testimony to robustness, we replicated the effect with modified comparisons that provided specific--albeit fictitious--brand comparisons. For example, the piecemeal condition stated that the focal brand contained "more Aloe-Vera than brand A (10 mg. Versus 8 mg.), more Vitamin E than brand B (9 mg. Versus 7 mg.)" and so on. The evaluation means in the noncomparison, single-comparison, and piecemeal comparison conditions were 10.33, 11.00, and 12.50, respectively. The corresponding purchase intentions were 10.17, 10.92, and 12.17. The

contrast between the noncomparison conditions were significant (evaluation:  $F_{1,33} = 13.11$ ,  $p < 0.01$ ; intention:  $F_{1,33} = 11.60$ ,  $p < 0.01$ ). More important, the single-comparison condition differed from the piecemeal condition (evaluation:  $F_{1,33} = 6.58$ ,  $p < 0.02$ ; intention:  $F_{1,33} = 4.53$ ,  $p < 0.04$ ).

Although the use of neutral or fictitious labels in these replications disallows conclusions regarding the appropriateness of subjects' responses, the results suggest a robust phenomenon that is format-driven.

## EXPERIMENT 1A

In this experiment we attempt a stronger test of the piecemeal effect by contrasting piecemeal ads with a comparative format that has been shown in prior research to be very persuasive through its ability to mislead. Specifically, we contrast piecemeal ads against the persuasive power of an incomplete comparison ad (Harris 1977; Johar 1995). No comparison brand is mentioned in incomplete comparisons, and therefore the meaning of the comparison is ambiguous (e.g., Car X offers more gas mileage). We predict that piecemeal comparisons will result in a higher evaluation of the focal brand than incomplete comparisons if consumers do not carefully consider the potential deception in the format. Unlike incomplete comparisons, piecemeal comparisons associate the focal brand with a set of familiar brands, which may enhance its evaluation (Kardes 1993). Prior research suggests that even an irrelevant comparison to an esteemed reference point can enhance evaluation of a target stimulus (Gilovich 1981).

### Method

Sixty-five marketing undergraduates participated in this experiment in exchange for a compensation of approximately \$5.00.

The only factor manipulated was the format of comparison (either incomplete comparison or piecemeal comparison). The focal brand of car was described on the same four dimensions as in Experiment 1. In the incomplete comparison condition, the focal brand was described as better on each attribute with no reference to any competitor. The piecemeal comparisons were constructed in exactly the same manner as in Experiment 1. We also used the same fifteen-point scales to measure brand evaluation, purchase intention, and confidence. In addition, we measured believability of the message claims on a fifteen-point scale.

## Results

Analysis revealed that the ad type had a significant effect on subjects' evaluation of the focal brand ( $F_{1, 63} = 6.17$ ,  $p < 0.02$ ; 9.16 in the incomplete comparison versus 10.39 in the piecemeal comparison group). Further, the effect of ad type on intention approached significance ( $F_{1, 63} = 3.00$ ,  $p < 0.09$ ; 8.70 versus 9.97). The effects on confidence and believability were not significant ( $F_s < 1$ ).

Taken together, the results from Experiment 1 and its follow-ups argue that the piecemeal format is very persuasive, even relative to other comparative formats that are more commonly observed in the advertising environment and more frequently studied in the laboratory. The results also illustrate the deceptive potential of the piecemeal format. In the remaining experiments we further document the phenomenon while exploring its basis.

## EXPERIMENT 2

Consistent with previous research on comparative advertising, the preceding experiment suggests that there are advantages from associating with other well-liked brands (cf. Dröge and Darmon 1987; Kardes 1993). We hypothesize that the effectiveness of piecemeal ads is also attributable to their ability to make seemingly strong claims without arousing the suspicion that might accompany explicit expression of the implication of the message. An explicit assertion that the focal brand is better than several well-known comparison brands on several dimensions may not be considered credible, especially when the message emanates from an advertisement for the focal brand. Piecemeal ads may imply general superiority over all competitors without explicitly making such a strong claim. Indeed, the deceptiveness of the ads studied by Johar (1995) and Pechman (1996) may stem from the subtlety of the claims. Our hypothesis is consistent with the view that inferences represent overinterpretations of literal assertions. We add that believability moderates acceptance of the interpretation. A lack of believability may generate wariness and a reduced persuasive effect.

In the present experiment we examine the effects of believability. Very strong explicit claims may be as persuasive as implied claims if the message source possesses unquestionable integrity. We vary both the message format (piecemeal versus explicit) and message source

(advertisement versus a credible consumer magazine). We predict that any advantage of a piecemeal ad will obtain only when the source is less than very credible.

### Method

*Subjects.* This experiment was conducted at major universities in Asia (N=108) and Europe (N=119). Subjects were undergraduate marketing students participating as part of a course requirement.

*Stimuli and Design.* Automobiles again served as the product category. The brand names were adjusted for local compatibility. In both locations, as in Experiment 1, the focal brand carried a fictitious name. In Asia the same focal brand name, “Ambassador,” and the same comparison brands were used as in Experiment 1. In Europe, the focal brand was named “Malegro,” and the comparison brands were four European midsize sedans (VW Passat, Opel Vectra, Ford Mondeo, and Renault Laguna). The comparison attributes were the same in both countries.

A 2 (message type) by 2 (message source) between-subjects design was used. The message type was either direct assertion or piecemeal comparison. In the assertion condition, the advertisement stated that the focal brand was better than each of the four comparison brands in terms of gas mileage, safety, roominess, and power. Thus, this condition is similar to the assertion condition of Harris (1977) and is comparable to the false-assertion condition of Johar (1995).

The piecemeal advertisement was similar in structure to the one used in Experiment 1. However, because our aim was to examine credibility effects rather than to demonstrate the potential for deception, we used the best brand (as identified by pretests) in the set as the comparison brand for each attribute of comparison. Note that because of the way the piecemeal comparisons were constructed, the piecemeal ad was *semantically equivalent* to the assertion ad in terms of both the strength and meaning of the claims.

The second factor manipulated was the message source. Approximately half of the subjects in each of the ad type conditions were told that the message was part of a print advertisement to be released by the manufacturer of the focal brand. The remaining subjects were told that the message appeared in a story featured in a forthcoming issue of a high credibility consumer magazine (*Choice* magazine in Asia and *Test Purchase* in Europe). After reading the information in either a piecemeal form or direct assertion form, subjects responded to a questionnaire that measured their evaluation

of the focal brand, confidence, and purchase intention via the same scales described in Experiment 1. We again measured believability of claims on a single fifteen-point scale .

## Results

The evaluation data were submitted to a three-way ANOVA in which country was added to the two experimental factors. Country exerted a main effect ( $F_{1, 219} = 34.1$ ) but importantly did not interact with the experimental factors.

There was a main effect of source ( $F_{1, 219} = 8.63$ ,  $p < 0.01$ ), which suggests that our manipulation was successful. More important, the message-by-source interaction was significant ( $F_{1, 219} = 5.25$ ,  $p < 0.03$ ). Descriptively, the means comport with our hypothesis (see Table 2). The lowest evaluations were obtained when the focal brand made direct assertions. A follow-up analysis revealed that when the source was the focal brand, the message format had a significant effect on the evaluations ( $F_{1, 219} = 6.37$ ,  $p < 0.02$ ). Specifically, the piecemeal comparison message resulted in a *more favorable* evaluation than did the assertion type of message. However, when the source was a consumer magazine, the message type did not influence the evaluation of the focal brand ( $F < 1$ ).

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Insert Table 2 about here  
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The purchase intention measure followed an identical pattern, but the interaction did not reach significance ( $F_{1, 217} = 1.72$ ,  $p < 0.2$ ). The effect of message on purchase intention approached significance when the source was a company-sponsored ad ( $F_{1, 217} = 3.02$ ,  $p < 0.08$ ) but not when the source was a consumer magazine ( $F < 1$ ). Fortunately, there were no effects on the confidence measures ( $F_s < 1$ ).

Subjects' assessment of the believability of the claims served as a check of the source manipulation. As expected, subjects in the consumer magazine condition rated the believability of the claims more highly than did subjects in the advertisement condition ( $F_{1, 219} = 21.31$ ). However, this main effect was qualified by a significant source-by-message interaction ( $F_{1, 219} = 4.46$ ,  $p < 0.04$ ). Follow-up tests revealed that when the source was a company-sponsored ad, subjects considered the piecemeal comparison to be more believable than a direct-assertion message ( $F_{1, 219}$

= 3.23,  $p < 0.08$ ). Thus, it is clear that piecemeal ads influence consumer evaluations even when they are from a source of relatively low credibility. However, there was no difference between the message types when the source was the more credible consumer magazine ( $F = 1.36$ ,  $p > 0.24$ ).

*Mediational Analysis.* To investigate the mediating role of perceived claim on attitude, we examined the three criteria proposed by Baron and Kenny (1986). First, the independent variable(s) should have a significant effect on the dependent variable. Second, the independent variable(s) should have a significant effect on the presumed mediator. Third, when both the independent variable(s) and the mediator are included in the model, the mediator should have a significant effect on the dependent variable but the effect of the independent variable(s) should be reduced.

The tests strongly supported the mediational hypothesis for the evaluation measure. When believability was included in the model, the simple effect of message format in the company sponsored ad condition was reduced to nonsignificance ( $F_{1, 218} = 2.60$ ,  $p > 0.1$ ). The message mean square declined from 30.74 to 10.73, a reduction of approximately 65%. The effect of the presumed mediator remained highly significant ( $F_{1, 218} = 36.5$ ). Thus, believability acted as a mediator of the effect of message format on focal brand evaluation when the source of the message was the focal brand.

Mediational tests were also conducted on the purchase intent measure. The marginally significant effect of message on purchase intentions when the source was the focal brand was reduced to nonsignificance when believability was introduced as a covariate ( $F_{1, 216} = 1.42$ ,  $p > 0.24$ ). The means square for the effect was reduced from 29.35 to 12.03, a reduction of 59%. Again, the effect of believability remained highly significant ( $F_{1, 216} = 13.85$ ,  $p < 0.01$ ). Thus, believability also acted as a mediator of the effect of type of ad on purchase intention when the source of the message was the focal brand.

## Discussion

Prior research has found that implications may be perceived identically to--and assigned the same truth value as--explicit assertions (Pechmann 1996). The present experiment showed that piecemeal comparisons resulted in *higher* overall evaluations of the focal brand than did explicit assertions when the source had lower credibility. In addition, subjects appeared to be unaware of the potential deception that the piecemeal messages can cause. Subjects considered assertion ads to be less believable than the piecemeal ads. Believability of the claims drove the interactive effect of

source and message on the overall evaluation of the focal brand. Thus, piecemeal claims appear to derive their advantage in part from their ability to mask the deception involved.

### EXPERIMENT 3

The results of experiment 2 suggest that consumers are less suspicious of piecemeal claims than semantically equivalent direct assertions. In the present experiment we manipulated factors that vary in the amount of skepticism they produce--all within the context of the piecemeal format. Specifically, we manipulated involvement and the source of the message. We hypothesized that sensitivity to the deception involved in the piecemeal message would be greater when the processing intensity is high (rather than low), particularly when the source of the message is an ad (rather than relatively more credible consumer magazines).

#### Method

*Subjects.* Subjects were business undergraduates at a major university in the United States. Ninety-three subjects were assigned to one of four experimental conditions. Subjects received course credits in exchange for their participation.

*Design and Manipulations.* The focal product category was indoor paint, and piecemeal comparison was the only form of message. We employed a 2 (source) X 2 (processing intensity) between-subjects design. Source was manipulated similar to Experiment 2. The piecemeal comparisons were attributed to either *Consumer Reports* or, by default, to the firm sponsoring the ad.

To manipulate processing, subjects in the low processing intensity condition were asked to review the information as though they were glancing at an advertisement in a magazine. In addition, they were asked to proceed to the next task as soon as they finished reviewing the information. In the high processing intensity condition, subjects were asked to review the information carefully and think about its meaning. Further, they were asked to take their time before proceeding further and were allowed to revisit the ad when responding to the dependent measures.

*Materials and Procedure.* In all conditions, the message claimed that the neutral focal brand (brand X) was superior to Glidden, Sherwin Williams, Lucite, Benjamin Moore, and Dutch Boy in terms of protection against fading, stain resistance, hiding of old coats, ease of application, and protection against humidity, respectively.

Subjects in all conditions reviewed the piecemeal information and responded to a questionnaire that measured their evaluation of the focal brand, purchase intentions, confidence, and believability of the ad.

### **Results and Discussion**

Analysis of the evaluation measure revealed that neither of the main effects ( $F_s < 1$ ) nor the interaction of source and processing intensity ( $F_{1,89} = 1.04$ ) approached significance. An identical pattern characterized the purchase intention measure (main effect  $F_s < 1$ ; interaction  $F_{1,89} = 2.17$ ,  $p > .14$ ), and confidence (main effect  $F_s < 1$ ; interaction  $F_{1,89} = 1.95$ ,  $p > .17$ ). Importantly, the manipulations also failed to influence believability (all  $F_s < 1$ ).

Unlike the preceding experiments, all subjects in the present experiment were exposed to a piecemeal message. It appears that the influence of the piecemeal format was able to withstand the combined effects of deeper processing and a relatively low credibility source. These results are highly consistent with the preceding experiments as well as with prior research showing only modest effects of increased vigilance, even in low credibility contexts (cf. Harris 1977). Before concluding that piecemeal formats lead inevitably to overinterpretation, we attempted a stronger test of message credibility.

## **EXPERIMENT 3A**

One change was made to the method described in the preceding experiment; specifically, a real brand was substituted for the neutral referent. Because the intent was to alert subjects to the possibility of deception, an existing but less esteemed brand was used. Walmart, a discount brand that is less specifically associated with paint than the comparison brands, became the focal brand. Given the previous results, it was unclear whether this alteration would differentially modify evaluation across conditions. However, insofar as there are synergistic effects, the least persuasive impact of the message should be observed when there is opportunity for deep processing and the source is biased.

### **Results and Discussion**

Focal brand evaluations were submitted to a two-way (source X processing intensity) ANOVA. Table 3 presents evaluations in different conditions. The results revealed that the



source-by-processing intensity interaction approached significance ( $F_{1, 130} = 2.93, p < 0.09$ ). A follow-up analysis revealed that the effect of source was significant under high processing intensity ( $F_{1, 130} = 5.91, p < 0.01$ ) but not under low processing intensity ( $F < 1$ ). Under high processing intensity, evaluation was significantly lower when the source of the comparisons was the firm than when the source was *Consumer Reports*. Confidence, again, did not vary ( $ps > 0.10$ ). Thus, evaluations from conditions with the greatest propensity to deceive were no less confidently held than evaluations from other conditions. No significant effects were obtained for purchase intention ( $ps > 0.30$ ) although, as expected, the highest intention accompanied shallow processing of the credible source and the lowest intention accompanied deeper processing of the biased source.

The believability scores also were consistent with expectations. Believability was highest when a credible source received relatively low attention and lowest when a biased source was more deeply processed. For the evaluation scores, the inclusion of this presumed mediator in the model caused a nearly 65% reduction in the effect of source (mean-square reduced from 45.02 to 17.20), although the effect was still marginally significant ( $F_{1, 129} = 2.84, p < 0.1$ ). The effect of the mediator remained highly significant ( $F_{1, 129} = 21.70, p < 0.001$ ).

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Insert Table 3 about here

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The results indicate that that piecemeal-based persuasion can be moderated but only modestly and only under extreme conditions. Consumers may become somewhat less pliant when processing is unconstrained, the comparisons are attributed to the sponsoring firm, and the claims of superiority are made about a brand that is less prestigious in the category than the comparison brands. We speculate that these conditions are rarely met in combination.

### General Discussion

The effectiveness of the piecemeal format of comparative advertising was demonstrated across various contexts and subject populations. Experiment 1 showed that a piecemeal message is more persuasive than either a noncomparative message or a direct-comparison message involving only one comparison brand. In Experiment 1A, we found that subjects assign a higher evaluation to an advertised brand when provided a piecemeal comparison than an incomplete comparison. Taken

together, the results suggest that piecemeal messages are effective in part due to the number of favorable comparisons they make to specific competitors. Although it is reasonable that favorable comparisons to esteemed competitors are particularly persuasive, the effect obtains even when the competitors are fictitious. Hence, a frequency or numerosity rationale seems to play a role (Alba and Marmorstein 1987). That is, assessment of the focal brand is based on a shallow consideration of the number of wins it compiles against its competition (cf. Estes 1976). However, inasmuch as piecemeal messages are more persuasive than single-comparison ads, the sheer number of comparisons cannot uniquely account for the results. The differentiating aspect of the piecemeal format is that it makes multiple comparisons across different competitors. Hence, pragmatic inference seems to play a role. The piecemeal comparison format is persuasive because it seduces consumers into drawing inferences about the focal brand that are not logically implied by the explicitly provided information. Subjects in our experiments reacted to the partial superiority claims as if superiority over each comparison brand across all attributes was claimed.

However, the persuasiveness of piecemeal comparisons arises not only from their ability to prompt pragmatic inferences. The piecemeal format also appears to inhibit the discounting responses produced by semantically equivalent explicit assertions (Experiment 2). Discounting of a piecemeal message itself may occur in the rare instance in which consumers possess prior beliefs about the quality of a questionable brand and process information more intensively from a source that is relatively less credible (Experiment 3A). All discounting effects appear to be mediated by the experienced believability of the piecemeal comparison.

In fact, our lone failure to find a piecemeal-superiority effect appears attributable to a failure to produce a believability difference. We conducted a replication of Experiment 2 in which specific attribute values were added to the description of the focal brand (e.g., “The Ambassador has better gas mileage than the Nissan Sunny [15 Km per liter].”). Unlike Experiment 2, in which the piecemeal description received higher evaluations than the direct-assertion description (despite their semantic equivalence), no evaluative effect was obtained. However, believability also did not vary across conditions. Apparently, the specific documentation neutralized the believability advantage enjoyed by the piecemeal format over the direct assertion condition. And, because both conditions were equivalent in terms of the number of comparisons made to esteemed competitors, the evaluation differences also evaporated (cf. Experiment 1).

Our results speak to related issues pertaining to consumer inference making and the general issue of comparative advertising. A number of recent studies have shown that inference making may be more common than originally thought. For example, correlational inferences are readily made about attributes that have an intuitive a priori relationship with the stated information even when careful scrutiny of the data would lead to different conclusions (Broniarczyk and Alba 1994). Our results emphasize pragmatic implication as an additional source of spontaneous inference making. Note that these types of inferences do not require elaboration of the presented information. The mere format in which information is presented may readily lead to inferences about unmentioned attributes. In general, pragmatically implied conclusions are easily drawn (Harris and Monaco 1978) and should influence consumer judgments under normal processing conditions.

Taken together, the naturalness of pragmatic implication and the results from our credibility manipulations are not only consistent with recent research on comprehension but also highlight consumer vulnerability to piecemeal messages. Gilbert (1991) has persuasively argued for a "Spinozan" view of comprehension, which holds that an utterance is accepted as true upon initial comprehension and must be effortfully disbelieved if it has dubious validity. Insofar as pragmatic inferences are naturally drawn, we should expect piecemeal ads to be effective in situations that do not provoke deep skepticism.

For these reasons, our results also relate to other recent findings regarding comparative advertisements and false beliefs about brand superiority. Although some authors have argued that the resultant deception should be legally actionable (e.g. Preston 1989), the inherent trade-off associated with strict regulation is not easily resolved (see Pechmann 1996). Regulation of piecemeal advertising faces similar difficulties. A piecemeal ad is literally accurate. The inferences it prompts may vary in accuracy as a function of the true state of the competitive market, the believability of its implications, and the consumer's state of vigilance.

**TABLE 1**  
**EVALUATION, PURCHASE INTENTION, AND CONFIDENCE**  
**UNDER VARIOUS TYPES OF ADVERTISING**  
**(EXPERIMENT 1)**

TYPE OF AD	EVALUATION	INTENTION	CONFIDENCE
Noncomparative	8.49	8.42	7.12
Pooled Direct Comparison Ads	9.12	8.76	8.24
Direct Comparison Against the Strongest Competitor	9.63	9.00	8.56
Piecemeal Comparison	10.81	10.57	10.00

**TABLE 2**  
**EVALUATION AND INTENTION AS FUNCTIONS OF THE MESSAGE TYPE**  
**AND THE SOURCE OF THE MESSAGE**  
**(EXPERIMENT 2)**

<b>SOURCE/ MESSAGE TYPE</b>	<b>EVALUATION</b>	<b>INTENTION</b>	<b>CONFIDENCE</b>	<b>BELIEVABILITY</b>
Advertisement/ Assertion	8.51	7.13	7.97	5.91
Advertisement/ Piecemeal	9.52	8.13	8.20	6.79
Consumer Reports/ Assertion	10.02	8.69	8.55	8.28
Consumer Reports/ Piecemeal	9.71	8.60	8.14	7.67

TABLE 3

EVALUATION AND INTENTION ACROSS EXPERIMENTAL CONDITIONS  
(EXPERIMENT 3A)

PROCESSING					
SOURCE	INTENSITY	EVALUATION	INTENTION	CONFIDENCE	BELIEVABILITY
Ad	Low	10.24	9.50	10.02	8.38
Ad	High	9.11	8.91	10.56	7.44
Consumer Reports	Low	10.24	10.00	11.27	9.15
Consumer Reports	High	10.75	9.18	10.03	8.73

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